

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph starting with "The wide-gap bipolar semiconductor element..." on page 18, line 16, and ending on page 19, line 24, with the following amended paragraph:

The wide-gap bipolar semiconductor element has a peculiar crystal defect depending on crystal face orientation, and this crystal defect may impair the reliability of the element. For example, in a pn diode as a typical wide-gap bipolar semiconductor element of a four-layer hexagonal shape Sic, an n-type semiconductor region is formed by epitaxial growth on a crystal face inclined 3 to 8 degrees with respect to the (0001) crystal face so that a single crystal can be obtained easily. Next, a p-type semiconductor region is formed on this n-type semiconductor region by epitaxial growth or ion implantation. When the above-mentioned n-type and p-type semiconductor regions are formed, a crystal defect referred to as basal plane dislocation occurs in both the semiconductor regions. It is known that when a pn diode having the basal plane dislocation is electrified, the basal plane dislocation forms "stacking faults." "stacking faults, each of which denoted by a reference sign 1X." It is considered that the stacking faults are formed by the impact energy generated when minority carriers implanted, for example, from the p-type semiconductor region to the n-type semiconductor region collide with the lattice point of a crystal. The quantity of the stacking faults formed by energization is greater as the current to be passed I for the energization is larger. The stacking faults trap, recombine and vanish implanted minority carriers, whereby the life-time of the minority carriers is shortened. The increase of the stacking faults shows a degradation phenomenon of the semiconductor region; as a result, the ON voltage becomes high. The high ON voltage results in the increase of the power loss during the energization, and there is a danger that the pn diode element may be destroyed by heat in some cases.